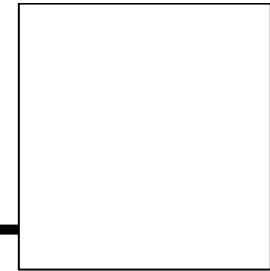




U.S. AIR FORCE



GLOBAL PERSONNEL RECOVERY SYSTEM

JEFX 2000

Integrity - Service - Excellence



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Global Personnel Recovery System

- **TWO YEAR OLD INITIATIVE**
 - **Deploy a Global Data Communication and Loc/ID System Available to any User, Anywhere, 24/7**
 - **PROVIDES:**
 - ✓ **Precise location/ID, tagging and tracking of personnel, vehicles, aircraft and vessels**
 - ✓ **Two-way OTH Near Real Time (NRT) data Comms**
 - ✓ **Secure, Encrypted, LPI/LPD/LPE Signal**

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GPRS System Description

- **CONCEPT**

- Develop State-of-the-art Combined Military and Civilian Search and Rescue (SAR) Package Hosted on GPS Satellites

- Government Segment – Use S-Band (Commercial) Two-way Data Capability to Provide Secure, Near Real Time Communications

- Public Segment – Use 406 MHz Repeaters to Relay Distress Messages, Including Return Link for Message Verification (Two Way Capability)

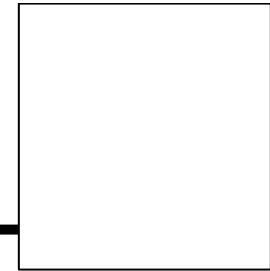
- **Government Segment Will be Available to DOD, Any Government Agency, and Coalition Allies**
- **Public Segment Will be Freely Available Internationally**

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GPRS Can Support



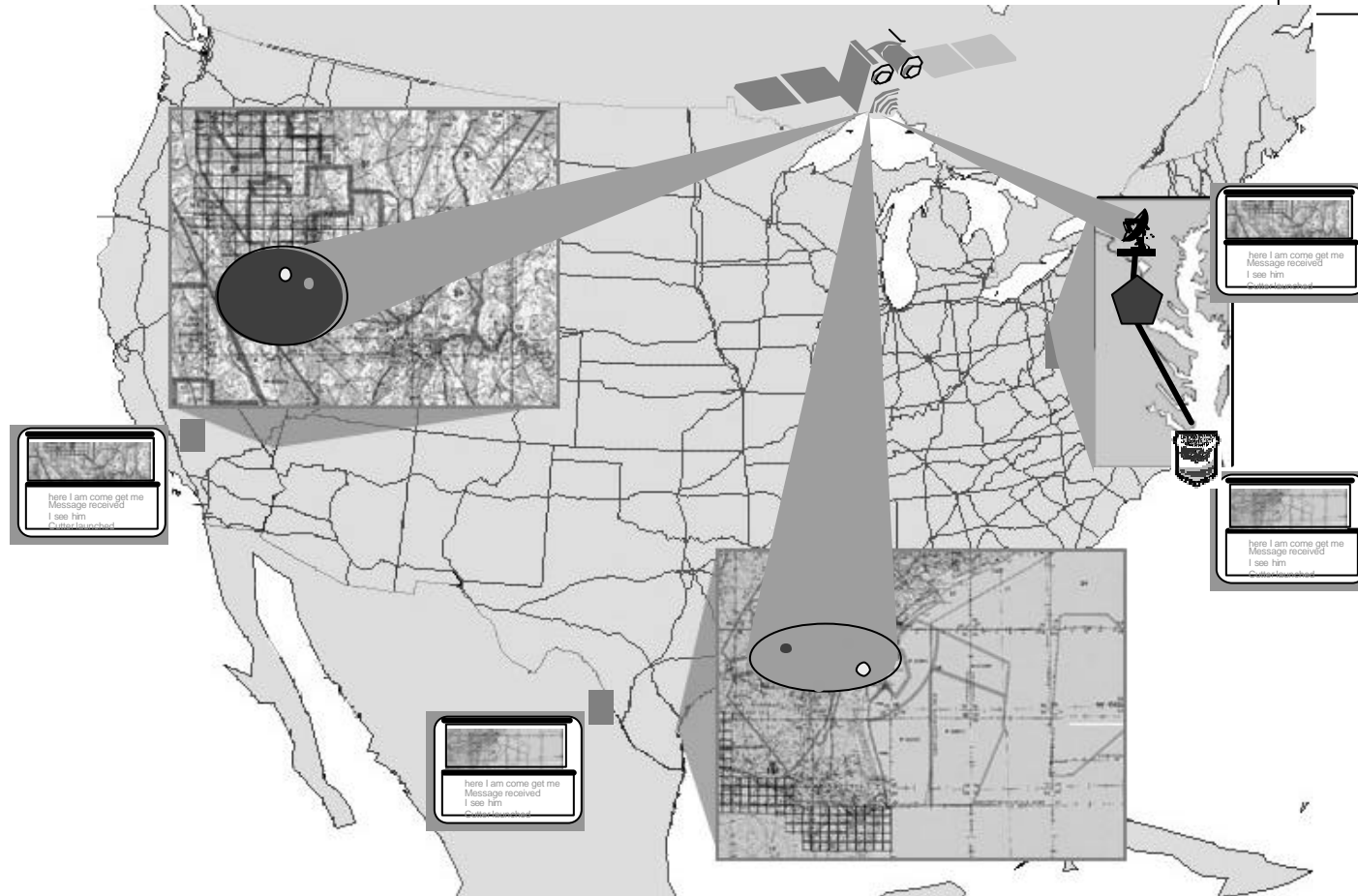
- ✓ **COMBAT SEARCH AND RESCUE (CSAR)**
- ✓ **CIVIL SEARCH AND RESCUE**
- ✓ **IN TRANSIT VISIBILITY (ITV)**
- ✓ **COMBAT IDENTIFICATION (CID)**
- ✓ **SAR TASK FORCE (SARTF) FLIGHT FOLLOWING**
- ✓ **WIDE VARIETY OF TAGGING/TRACKING REQUIREMENTS**
- ✓ **GROWING DATA EXFIL REQUIREMENTS**
- ✓ **LOGISTICS - ARMY Movement Tracking System (MTS)**

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JEFX 2000 DEMO LOCATIONS

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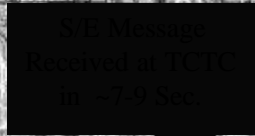


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CSAR

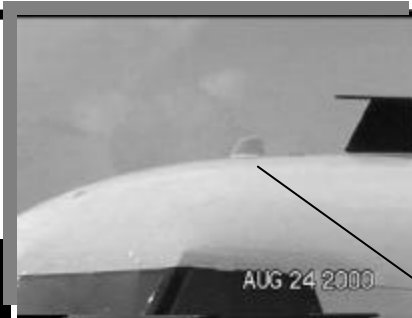
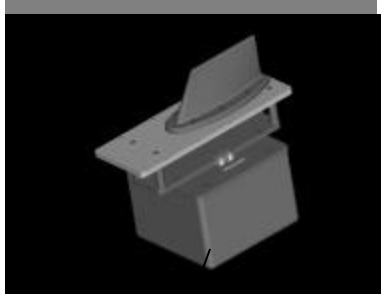
CIVIL SAR

[illegible]



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GPRS INSTALLATION



US CUSTOMS P-3

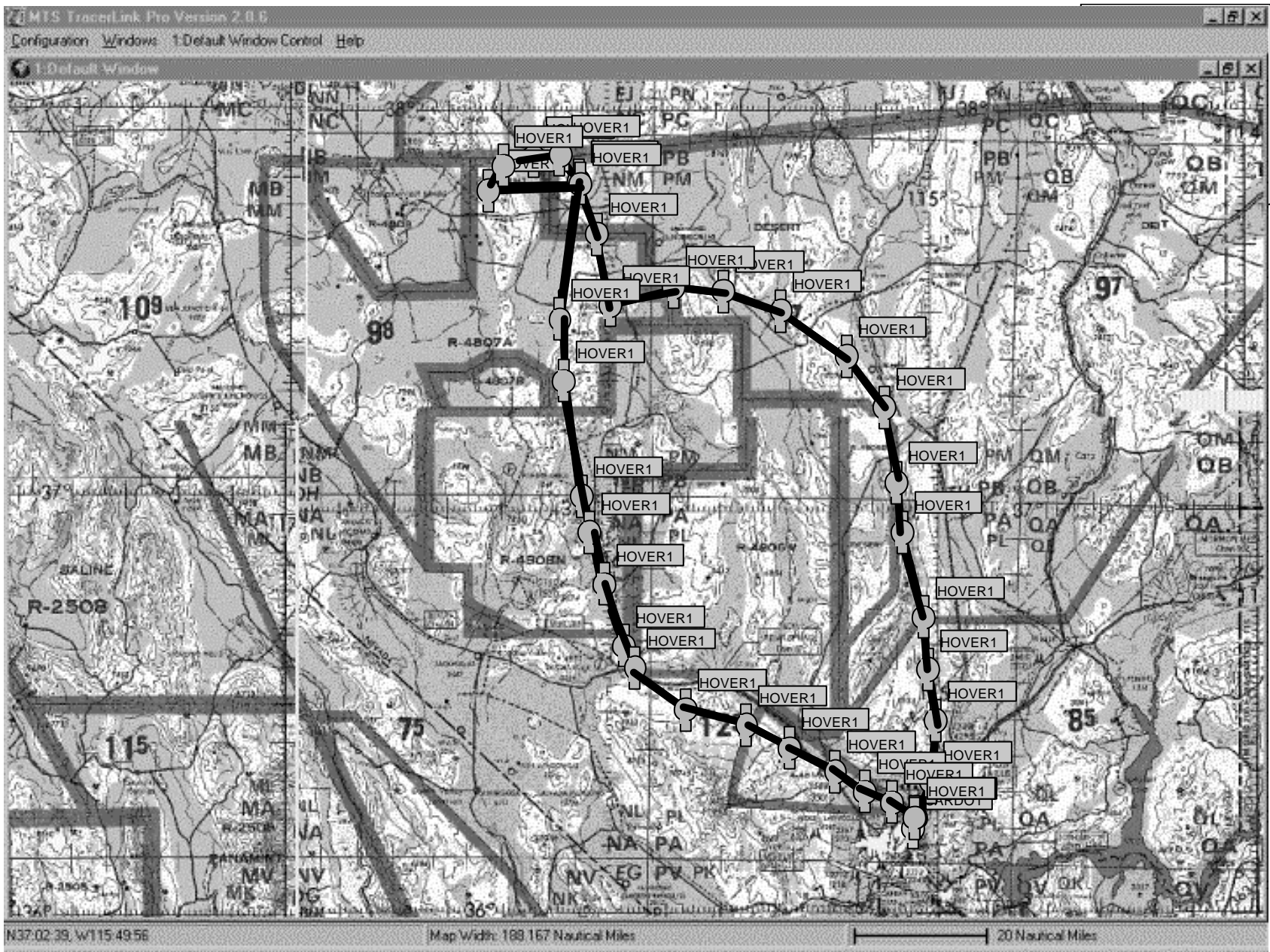


AF HH-60G



USCG CUTTER

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Requirements For GPRS Success

- **RESERVE SPACE ON GPS BLOCK IIF/III
FOR GPRS PACKAGES**

- **CREATE FORMAL GPRS PROGRAM**
 - **UTILIZE ACTD AS FIRST STEP**
 - **TRANSITION TO JOINT PROGRAM**

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GPRS System Capabilities

Military/Government Segment

- Burst transmission - 2-6W, 40-550 milliseconds
- Coverage - Global
- Capacity - greater than 300,000 transmissions/hour
- Near real time messaging - delivery <30 sec
- Spread spectrum - (S band) up to 16 MHz
- Over-the-air programmable LPI/LPD/LPE performance
- NSA approved crypto with over-the-air re-key
- Users operate virtual private networks

Public Segment

- Burst transmission – ID and embedded GPS
- Coverage - Global
- Receive and process 406 alert messages
- Two way messaging for 406 customers

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